

OPTICAL FIBER COATING SYSTEM AND COATED OPTICAL FIBER**ABSTRACT OF THE INVENTION**

The present invention provides optical fiber coating systems and coated optical fibers having hydrophilic primary coatings. According to one embodiment of the invention, a coated optical fiber includes an optical fiber having a core and a cladding; a hydrophilic primary coating encapsulating the optical fiber, the primary coating having a Young's modulus less than about 2 MPa; and a secondary coating encapsulating the primary coating, wherein the primary coating exhibits substantially no water bubble formation and substantially no delamination when the coated optical fiber is soaked in water at 23 °C for 30 days.